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U.S. Department of Transportation
Federal Aviation Administration

# Great Lakes Region Air Traffic Cooperative Education Program

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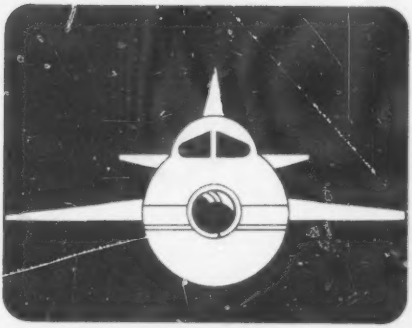

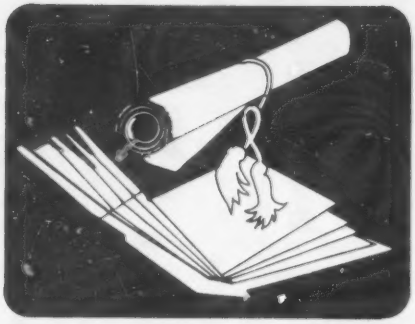

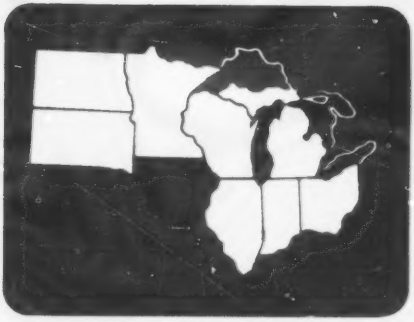

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## Introduction

"Cooperative Education" is not a new term in the Federal Government. In keeping with its progressive image and its human relations philosophy, the Federal Aviation Administration (FAA) has in existence a highly successful program in the air traffic division.

It is the purpose of this booklet to introduce you to the Air Traffic Co-Op Student Program. First, we will examine the objective of the program and where the program stands today. Then we will take a look at more specific student concerns: What the program offers a prospective student, the qualifications needed to be considered for the program, what positions are available at air traffic facilities, what duties the co-op student can expect to perform, and how a student's work is evaluated.

After a brief synopsis of the Federal Aviation Administrations history and mission, we will take you on a more detailed look at air traffic and then move on to examine the co-op student program.



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## History and Mission of the Federal Aviation Administration

The Federal Aviation Administration traces its ancestry back to the Air Commerce Act of 1926, which led to the establishment of the Aeronautics Branch (later reorganized as the Bureau of Air Commerce) in the Department of Commerce, with authority to certificate pilots and aircraft, develop air navigational facilities, promote flying safety, and issue flight information. In 1958, the same year American jets entered commercial service, Congress passed the Federal Aviation Act which created the independent Federal Aviation Agency. In April 1967, the Federal Aviation Agency became the Federal Aviation Administration (FAA), and was incorporated into the new Department of Transportation, which had been established to give unity and direction to a coordinated national transportation system. The FAA is the largest of the seven administrations which constitute the Department of Transportation.

The mission of the FAA is to provide for the safe and efficient utilization of the Nation's airspace, in addition to the promotion and regulation of civil aviation and ensuring safe and orderly growth of aviation.

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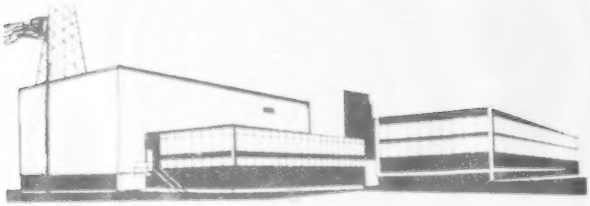
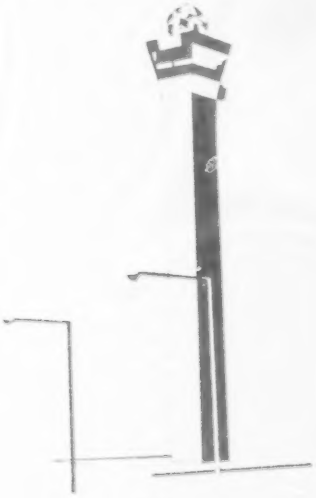
Options Within Air Traffic



Center

Tower



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## The Air Traffic Control System

One of FAA's principle responsibilities is the operation and maintenance of the world's largest and most advanced air traffic control and air navigation system.

Almost half the FAA's workforce of 50,000 plus people are engaged in some phase of air traffic control. They staff some 400 airport traffic control towers, 25 air route traffic control centers, and over 300 flight service stations.

The air traffic control/air navigation system in the United States is a vast network of facilities located in all 50 states and in such far away places as Guam, American Samoa, Panama, and Puerto Rico.

The FAA is divided into nine regions, each headed by a director who has the resonsibility for the direction and control of towers, centers, flight service stations, facility maintenance sectors, and other FAA operations within its geographical boundaries.

The Great Lakes region, which is one of the largest and busiest regions, comprises eight states: Ohio, Michigan, Indiana, Illinois, Wisconsin, Minnesota, North and South Dakota. There are four air route traffic control centers, 68 airport traffic towers, and 43 flight service stations.

## Air Route Traffic Control Centers

Air route traffic control centers handle en route aircraft operating under instrument flight rules (IFR) between airport terminal areas. Together, the 25 centers log more than 27 million flights per year with 13 centers recording in excess of 1 million operations each.

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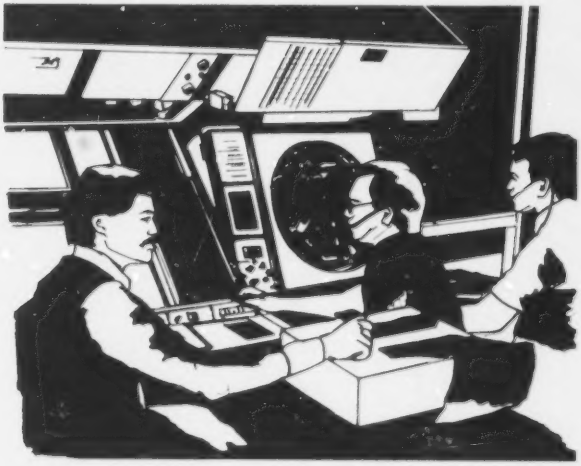
Controllers who work in centers maintain a progressive check on aircraft, issuing instructions, clearances, and advice, as well as initiating search and rescue operations to locate overdue aircraft.



The typical center has responsibility for more than 100,000 square miles of airspace generally extending over a number of states. To keep track of aircraft in this area, a center may use as many as six or seven long-range radars and 10 to 20 remote air-ground communication sites. Each radar covers an area 200 miles in radius.

The controller staff can range from 300 to 700, with more than 150 on duty during peak periods at the busier facilities. In addition, each facility has its own Airway Facilities sector which may include as many as 125 engineers and technicians.

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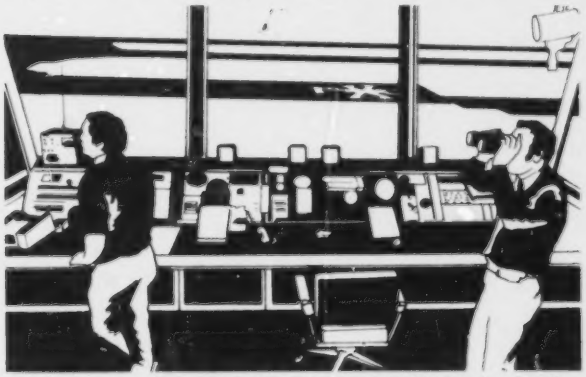
## Towers

Air traffic controllers assigned to airport traffic control towers control flights within a 3 to 40 mile radius of the airport each serves, under both visual flight rules (VFR) and Instrument Flight Rules (IFR).

In addition to directing actual takeoffs and landings, approximately 150 of the 400 FAA towers also provide radar approach and departure control services to IFR aircraft using the primary airport as well as many secondary satellite airports in the terminal approach control area. Control tower facilities can range from the familiar glass-walled cats on top of an airport terminal building to freestanding structures



soaring more than 200 feet in the air. Similarly, staffing can range from a three or four person operation which keeps the tower open 10 to 12 hours a day to a controller workforce of more than 150, working shifts around the clock. Together, the 400 FAA-staffed control towers direct more than 65 million operations annually, and this is forcast to pass the 80 million mark by the end of the decade.

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## Flight Service Stations

Flight service stations are the direct descendants of the Interstate Airways Communication Systems (INSAC) established in the 1920's to provide weather data and other assistance to the early airmail pilots.

Flight service station specialists provide assistance to pilots who must obtain such information as terrain information, weather peculiarities, preflight and inflight weather information, suggested routes, altitudes, indications of turbulence, icing, and any other information pertaining to the safety of flight. They also process inbound and outbound teletype messages pertaining to the movement and control of aircraft. The FAA presently operates more than 300 flight service stations at airports around the country. Although a gradual reduction in this number is anticipated with services provided by a fewer number of high-tech Automated Flight Service Stations (AFSS), they will continue to remain a vital link in the system. While general aviation pilots are the principle users of these facilities, they also serve the military and the air carriers. The size, staffing, and hours of operation for flight service stations vary from location to location.



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Busier facilities operate around the clock and may have a total complement of 50 specialists or more who brief pilots on weather, airport conditions, winds aloft, preferred routes, and other flight planning data. Many flight service stations also are equipped with direction-finding equipment enabling them to guide lost pilots to safety.

## The Air Traffic Control Specialist

The job of an air traffic control specialist is a uniquely demanding one requiring a special kind of person. Essentially, a controller's business is to keep aircraft traffic flowing orderly, efficiently, and safely.

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## What the Program Offers

The Air Traffic Cooperative Education Program is designed to prepare students for careers in the air traffic service of the Federal Aviation Administration. It provides for an integration of educational theory with practical work experience. Under this program, students alternate periods of full-time training and work with full-time study. The Cooperative Education Program is intended to provide a source of college trained personnel for entry into the air traffic control career field. Upon satisfactory completion of a Bachelor's degree, the student may be considered for permanent employment with the FAA within the Great Lakes Region.

## How Students Are Selected for the Program

Once a year a Co-op field coordinator visits a university participating in the Co-op Program. Interested students are invited to attend a lecture and audio visual presentation. Following the presentation, there is a question and answer period. To be eligible for an interview and test, the student should meet the following requirements:

- Be in attendance at a participating college or university on a full-time basis. Completion of the freshman year is required before being appointed to the program.
- Student must demonstrate average or better academic ability or potential for academic achievement by maintaining a college grade average of 2.0 on a 4.0 scale or the equivalent.
- Student must be at least 16 years old. Students who have reached their 31st birthday are ineligible for entry into terminal and center specializations in the Federal Aviation Administration. After

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their 31st birthday, students may enter the flight service station specialty only.

- Student must be a U.S. Citizen.
- If enrolled in a 2-year participating institution, students must transfer to a 4-year participating institution after receiving an associate degree, and complete the co-op periods and requirements for a baccalaureate degree.
- **Not** be the son or daughter of an employee of the FAA (except under the unusual circumstances set forth in appendix G of chapter 213 of the Federal Personnel Manual).

Students who meet the above requirements and who are recommended by the participating institution will qualify for:

- The Air Traffic Control Aptitude Exam: a score of 70 or better is required.
- A personal interview.
- An extensive physical examination administered by an FAA designated medical examiner. In addition, student must possess emotional and mental stability.
- A security background check to satisfy FAA's secuirity needs.

If selected for the Air Traffic Cooperative Education Program, students are appointed to a trainee position. The appointment remains in effect up to 120 calender days after the date of graduation. Initial appointment levels are established as follows:

| **Completed at Least** | **Appointment** |
|---|---|
| 30 Semester/Trimester or 45 Quarter Hours | GS-3 |
| 60 Semester/Trimester or 90 Quarter Hours | GS-4 |

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## Promotion Eligibility

During the Air Traffic Cooperative Education Training Program, student trainees are eligible to receive promotions. However, no student may be promoted during the first work assignment period. Promotion eligibility is based on completing additional academic credit, satisfactory performance during a previous co-op work assignment, and a supervisory recommendation or capability for promotion.

| Promotion To: | Requirements |
|---|---|
| Student Trainee GS-4 | Two full academic years of study (60 semester/trimester hours or 90 quarter hours.) Also, a record of satisfactory employment as a student trainee, GS-3. |
| Student Trainee GS-5 | Three full academic years of study (90 semester/trimester hours or 135 quarter hours) and one period of satisfactory employment as a student trainee, GS-4. Or student must have completed 2-1/2 years of satisfactory work experience as a student trainee, GS-4. |

## Length of Program

Work periods are 17, 18, or 26 weeks in length, depending on the academic and co-op schedule of the participating educational institution. Normally, at least two 17 and one 18 week work periods are required for schools operating on a semester or trimester academic year, and two 26-week periods


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are required for schools operating on a quarterly academic year. Fifty-two weeks of co-op work experience is required for full-time employment with the Federal Aviation Administration upon graduation.

## Pay, Leave, and Benefits

During the work period, the student will receive the salary of a GS-3, GS-4, or GS-5, whichever is appropriate. The student also will be paid for night differential and Sunday premium pay. He/she will accrue annual sick leave. The student will be eligible for Federal life insurance and participation in health benefit plans. Upon completion of each period of employment, the student will be placed in a leave-without-pay status, pending their return to full-time employment.

## Employment After Graduation

During the 120-day period after graduation the student has the option of accepting or declining permanent employment with the Federal Aviation Administration. The Federal Aviation Administration may either accept or reject the student for permanent employment.

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## Working for the FAA

Accepting a career with the Federal Aviation Administration can be both challenging and rewarding.

It also means fair and equal treatment without regard to politics, race, color, religion, national origin, or sex.

As an FAA employee, you will accept a trust which will require flexibility, creativity, productivity and innovation. You will also accept a role which will demand personal commitment, teamwork, professional excellence, and a willingness to go "that extra mile."

The future is yours!

For further information on participating institutions and other requirements, please contact:

FAA, Great Lakes Regional Office
Human Resources Management Division
2300 East Devon Avenue
Des Plaines, IL 60018
Attention: AGL-14



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